

C1  
contd.  
sub D17

(b) allowing the first monomer to attach directly or indirectly to the surface of the support at the one or more localized areas;

(c) repeatedly dispensing an additional group of added monomers in droplets of less than 5 nl onto the surface of the support at the one or more localized areas in a manner to couple with a compound at the one or more localized areas until an array of at least 10 different polymers at different localized areas is formed.

C2  
sub 1

76. (Amended) The method of claim 48 wherein the step of dispensing includes a dispenser comprising a plurality of dispensing units, wherein the plurality of dispensing units is in fluid communication with a solution comprising a monomer and wherein steps (a) and (c) comprise dispensing a droplet of less than 5 nl from one or more of the plurality of dispensing units.

116. (Amended) A method of forming an array of polymers on a support having one or more localized areas comprising

C3

(a) locating a dispenser comprising a plurality of dispensing units a distance away from a surface of the support, wherein the plurality of dispensing units is in fluid communication with a solution comprising a monomer;

(b) dispensing at least one droplet of less than 5 nl from the dispenser, with the at least one droplet contacting the surface at a localized area smaller than 1 cm<sup>2</sup>;

(c) allowing the monomer to attach directly or indirectly to the surface of the support at the localized area;

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(d) repeating steps a through c to attach a same or different monomer at a same or different localized area until an array of at least 10 different polymers at different localized areas is formed.

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